



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/678,089	10/06/2003	Cheng-Chih Wang	0941-0846P	4495

2292 7590 01/18/2006

BIRCH STEWART KOLASCH & BIRCH
PO BOX 747
FALLS CHURCH, VA 22040-0747

EXAMINER

CRIBBS, MALCOLM D

ART UNIT PAPER NUMBER

2115

DATE MAILED: 01/18/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/678,089	Applicant(s) WANG, CHENG-CHIH	
	Examiner Malcolm D. Cribbs	Art Unit 2115	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 06 October 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) ☒ Notice of References Cited (PTO-892) | 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) ☐ Notice of Informal Patent Application (PTO-152) |
| 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) ☐ Other: _____ |

DETAILED ACTION

Claims 1-13 are presented for examination.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
3. As per claims 1 and 8, "a selection controller to output a selection signal to the control terminal of the selection unit, such that the selection unit outputting one power indication signal and the first signal" is not clearly understood. Therefore, these claims are unclear because the selection unit outputs both the power indication signal and the first signal as opposed to outputting one power indication signal or the first signal.
4. Any claim not specifically addressed, above, is being rejected as incorporating the deficiencies of a claim upon which it depends.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2115

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Applicant's admitted prior art (AAPA) in view of Meynard (Publication No. US 2003/0229816).

7. As per claim 1, AAPA teach the invention, comprising:

a selection unit [Fig. 2 unit 20; stated as a conventional method];

a register to store an adjustment signal [Fig. 2 register 16];

a selection controller to output a selection signal to the control terminal of the selection unit [Fig. 2 controller 18]; and

a PWM controller coupled to the selection unit to produce a power voltage to the CPU [Fig. 2 PMW 12].

8. AAPA does not teach the process of adjusting the power voltage based on load and operating temperature variations while running in an overclock mode. Specifically AAPA teaches the controlling of power voltage based on load and operating temperature through a VID signal or the controlling of power voltage based on overclock mode. AAPA fails to detail the controlling based on load and operating temperature when running in an overclock mode. A routineer in the art would have been motivated to look for a teaching for the possible controlling of power voltage dependent on load and temperature while in an overclock mode.

Art Unit: 2115

9. Meynard teaches another process of adjusting power voltage based on load and temperature. The control signal [Fig. 2 240] is comprised of load and temperature information to regulate the processor voltage in a first mode [F1] or a second mode [F2 overclock mode]; while in F2 mode, power voltage [frequency is proportional to voltage] is controlled still based on load and operating temperature [[0053], [0056]-[0057], [0078]]. In summary, Meynard teaches a process of adjusting power voltage based on load and temperature during an overclock mode instead of only adjusting power voltage for overclocking.

10. It would have been obvious to one of ordinary skill in the art to combine the teachings of AAPA and Meynard because they both teach adjusting power voltage while running in an overclock mode. Meynard covers the deficiency of AAPA by teaching the detail of controlling voltage based on load and temperature while running in an overclocking mode.

11. As per claim 2, Meynard teaches the invention of the CPU is disposed in a computer system and controls the power based on whether the system is operated in a normal mode or an overclock mode [0056].

12. Claims 3, and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over AAPA in view of Meynard [Publication No. US 2003/0229816] as applied to claim 1 above, and further in view of Cheng et al [US Patent No. 6,963,992].

13. AAPA and Meynard do not teach the process of resetting the CPU when it does not operate properly in the overclocking mode. Specifically AAPA and Meynard teach controlling the power voltage while running in an overclock mode, as discussed above. Cheng et al teach the changing of frequency [voltage] while operating in an overclocking mode. Cheng et al teach a method to reset the processor when it is not operating properly in an overclocking mode [Col 1 lines 42-51].

14. It would have been obvious to one of ordinary skill in the art to combine the teachings of AAPA and Meynard with Cheng et al because they all teach a method of adjusting the power voltage while operating in an overclock mode. Cheng et al's teaching of resetting the processor when it is not operating properly in an overclock mode would improve the accuracy of AAPA and Meynard systems.

15. As per claim 4, Cheng et al teach the invention of the register and the selection controller communicate with the BIOS of the computer through an interface bus [Fig 3].

16. As per claim 7, AAPA teaches the invention of the CPU adjusts the power indication signal according to load and operating temperature thereof [Fig 2 Svid Col 1 lines [0006]].

Art Unit: 2115

17. As per claims 8-13, it is directed to an apparatus to implement the system as set forth in claims 1-7. Therefore, it is rejected for the same basis as set forth hereinabove.

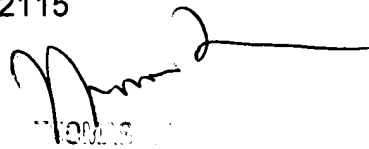
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Malcolm D. Cribbs whose telephone number is 571-272-5689. The examiner can normally be reached on M-F 8AM-430PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Lee can be reached on 571-272-3667. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Malcolm D Cribbs
Examiner
Art Unit 2115


MALCOLM D. CRIBBS
EXAMINER
ART UNIT 2115